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| 95683 7590 02/23/2012 Leydig, Voit & Mayer, Ltd. (Frankfurt office) Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, IL 60601-6731 | | | | |
| EXAMINER | | | | |
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/797,382
Filing Date: March 10, 2004
Appellant(s): TRINKEL ET AL.

Erik Swanson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 21, 2011 appealing from the Office action mailed August 16, 2011.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

No claims are allowed

Claims 1, 3 and 7-17 are pending and stand finally rejected.

Claims 1, 3 and 7-17 are appealed.

Claims 2 and 4-6 are canceled.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office

action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(6) Grounds of Rejection to be Reviewed on Appeal

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

| | | |
|-----------|--------------------|---------|
| 6,185,530 | Ittycheriah et al. | 8-1998 |
| 6,185,530 | Brodsky | 3-1996 |
| 6,363,348 | Besling et al. | 10-1998 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7-11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ittycheriah et al. (USPN 6,185,530), hereinafter referenced as Ittycheriah in view of Brodsky (USPN 5,809,471).

Regarding **claim 1**, Ittycheriah discloses a method for at least one of generating and expanding a vocabulary database of a speech recognition system (vocabulary expansion; column 3, lines 35-51 and column 5, lines 20-54), comprising:

providing a computer-based audio module (computer-based; column 2, lines 60-64 with column 3, line 35 – column 4, line 14); and

training the speech recognition system (speech recognition) by acoustic training using the audio module (acoustic; column 3, line 35 – column 4, line 14),

wherein the training the speech recognition system is performed by:

providing the audio module with vocabulary data (vocabulary; column 3, line 35 – column 4, line 14 with column 5, lines 20-54); and

speaking the vocabulary data (figure 1; speech utterance and element 24 with conventional input devices; column 5, lines 20-54) to the speech recognition system (speech recognition system) in an automated manner using the audio module so as to expand the vocabulary database (vocabulary expansion; column 3, line 35 – column 4, line 14 with column 5, lines 20-54 and column 6, lines 40-42), but does not specifically teach providing an audio module with vocabulary data in a streaming mode from a telecommunications network.

Brodsky discloses a method comprising providing an audio module with vocabulary data in a streaming mode from a telecommunications network (abstract with column 3, line 52 – column 4, line 66), to provide expanded information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ittycheriah's method as described above, to obtain and store expanded inform for items and keywords (abstract with column 1, lines 51-67), as taught by Brodsky.

Regarding **claim 3**, Ittycheriah discloses a method wherein the training the speech recognition system (speech recognition system) is performed by providing the audio module with vocabulary data from a speech database (column 3, line 35 – column 4, line 14 with column 5, lines 20-54).

Regarding **claim 7**, Ittycheriah discloses a method of expanding a vocabulary method further comprising creating the speech database by automated speech synthesis of text data using a speech synthesis unit (TTS synthesis; column 5, lines 20-54).

Regarding **claim 8**, Ittycheriah discloses a method further comprising providing the text data from a text database (text; column 5, lines 20-54).

Regarding **claim 9**, Ittycheriah discloses a method wherein the audio module includes a speech synthesis unit (speech synthesis), which converts text data to speech data (TTS; column 5, lines 20-54).

Regarding **claim 10**, Ittycheriah discloses a method further comprising providing the text data from a text database (text; column 5, lines 20-54).

Regarding **claim 11**, Ittycheriah discloses a method further comprising:

creating a text database (text) in an automatic manner (automatic; column 5, line 20 - column 6, line 4); and

providing the text data to the speech synthesis unit from the text database (synthesis; column 5, lines 20-54).

Regarding **claim 14**, Ittycheriah discloses a method wherein the creating the text database is performed by automatically (automatically) reading the text data from the at least one text data source using a data processing system and wherein the automatically storing (memory) is performed using the data processing system (processor; column 5, line 20 – column 6, line 4).

Regarding **claim 15**, Ittycheriah discloses a method comprising:

creating the speech database by automated speech synthesis of text data (TTS synthesis) from a text database using a speech synthesis unit (text; column 5, lines 20-59) and

analyzing and processing the text data prior to the speech synthesis (column 5, lines 20-59).

Regarding **claim 16**, it is interpreted and rejected for similar reasons as set forth in claim 1. In addition, Brodsky discloses a speech recognition system comprising:

a vocabulary database (vocabulary; column 4, lines 18-35);

a text database (text; column 4, lines 18-35); and

a computer-based audio module (processor) a speech synthesis unit configured to receive text data from the text database (text) by acoustic speech input (acoustic)

and convert the data to speech data, the speech data stored in a speech database (column 4, lines 18-67).

wherein the speech data is spoken into the vocabulary database (vocabulary) in an automated manner (automatically) using the audio module so as to expand the vocabulary database (column 3, line 52 – column 4, line 66 with column 1, lines 51-67).

Regarding **claim 17**, it is interpreted and rejected for similar reasons as set forth in claim 1. In addition, Brodsky discloses a method wherein a text database is generated automatically searching a telecommunications network for text data related to a selected search term (column 3, line 52 – column 4, line 66).

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ittycheriah in view of Brodsky and in further view of Besling et al. (USPN 6,363,348), hereinafter referenced as Besling.

Regarding **claim 12**, Ittycheriah in view of Brodsky discloses a method for expanding vocabulary, but does not specifically teach using a search engine.

Besling discloses a method comprising:

finding the text data in an internal or external telecommunications network (internet) using at least one search engine, the text data being associated with at least one search term (search; column 9, lines 42-49);

receiving the text data from at least one text data source (text; column 9, lines 42-49); and

automatically storing the text data in the text database (column 7, line 66 – column 9, line 49), for up-to-date textual data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ittycheriah in view of Brodsky's method as described above, to create a language model which matches the context identifier and is also available for user by other users having the same interest (column 9, lines 42-49), as taught by Besling.

Regarding **claim 13**, it is interpreted and rejected for the same reasons as set forth in claim 12. In addition, Besling discloses a method wherein the telecommunications network includes the Internet (Internet; column 6, lines 1-37).

(10) Response to Argument

Regarding pages 5–8 of the Appeal Brief filed December 21, 2011, Appellants argue that the prior art cited does not teach speaking the vocabulary data to the speech recognition system in an automated manner using the audio module, so as to expand the vocabulary database. Appellants explain that the buffer vocabulary of Brodsky, which is merely a temporary database, is incapable of speaking vocabulary data. Additionally, Appellants explain that Ittycheriah does not cure the deficiency since Ittycheriah merely describes providing a speech utterance pre-processor with words spoken by a particular user to determine potential acoustic confusion.

However, Ittycheriah teaches providing the audio modules with vocabulary data and speaking, which is in a speech synthesis format, the vocabulary data to the speech

recognition system using the audio module so as to expand the vocabulary database. Brodsky was applied to teach providing data in an automated manner using a streaming mode. Figure 1, element 26 of Ittycheriah is replaced with Bodsky's figure 1, element 102 using KSR (simple substitution of one known element for another to obtain predictable results). In this instance, since Ittycheriah's figure 1, element 22 (vocabulary expansion processor) is already in a format that is synthesized, it would have been obvious to one of ordinary skill in the art to substitute Ittycheriah's output device with Brodsky's context extractor, to allow Ittycheriah's method to expand a database in a streaming and automated fashion. It is noted that temporary database (buffer), as pointed out in Appellant's brief, pages 9 and 11, is not used to teach the combination and therefore, does not render Ittycheriah inoperable for its intended purpose.

Regarding pages 8-9, Appellants argue that unlike *In re Venner*, the cited automation is not the mere automation of a known manual activity and also provides substantially different results. The Office explained that *In re Venner* was used as an additional reason as to how automating manual activity is routine skill in the art. In addition, the combination of Ittycheriah and Brodsky teaches the automated processing since the input signal is a TV, radio, telephone, etc. (figure 1 with column 3, line 52 – column 4, line 48). Therefore, Appellants arguments have been considered, but are not persuasive.

Regarding Appellants arguments bridging pages 10-11 that the combination of Ittycheriah and Brodsky is improper, Appellants arguments are not persuasive for

reasons set forth above. Ittycheriah teaches providing the audio modules with vocabulary data and speaking, which is in a speech synthesis format, the vocabulary data to the speech recognition system using the audio module so as to expand the vocabulary database. Brodsky was applied to teach providing data in an automated manner using a streaming mode. Figure 1, element 26 of Ittycheriah is replaced with Brodsky's figure 1, element 102 using KSR (simple substitution of one known element for another to obtain predictable results). Since Ittycheriah's figure 1, element 22 (vocabulary expansion processor) is already in a format that is synthesized, it would have been obvious to one of ordinary skill in the art to substitute Ittycheriah's output device with Brodsky's context extractor. Such combination allows Ittycheriah's method to expand a database in a streaming and automated fashion.

Appellants argue on pages 11-12 that Besling fails to disclose or suggest "speaking the vocabulary data to the speech recognition system in an automated manner using the audio module so as to expand the vocabulary database," and that "the speech data is spoken into the vocabulary database in an automated manner using the audio module so as to expand the vocabulary database". Additionally, it is respectfully submitted that Besling fails to disclose or suggest "providing the audio module with vocabulary data in a streaming mode from a telecommunication network," and "a computer-based audio module including a speech synthesis unit configured to receive speech data in a streaming mode from a telecommunication network." All has been explained above and is interpreted and rejected for similar reasons as set forth.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Jakieda Jackson/

Conferees:

/David R Hudspeth/

Supervisory Patent Examiner, Art Unit 2626

/Michael N Opsasnick/

Primary Examiner, Art Unit 2626